

DETAILED ACTION

1. This office action is in response to the amendment filed on 6/08/2011, in which claims 1-3, 5-8, 10-12 are pending, claims 11-12 are new and claims 1,2, 8 and are currently amended.

Claim Objections

2. Claims 1 and 8 are objected to because of the following informalities: Claim 1, line 20 and claim 8, line 9, should be changed from "the drive lever having a free end fixedly attached to the drive lever" to -- the drive lever having a free end fixedly attached to the base--, as the previous statement is a typographical error.

Claim 2, lines 6-7, should be changed from "wherein the inclination is smaller" to -- wherein the inclination angle is smaller--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Brennenman et al. (U.S. Patent 3,811,188), herein referred to as Brennenman. Brennenman discloses a shaving apparatus(10) comprising a base (10); a shaving head

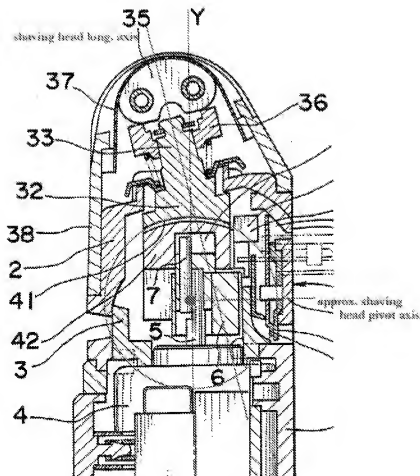
(18) mounted on the base, the shaving head having a central longitudinal axis along a center of the shaving head in a longitudinal direction of the shaving head; wherein the shaving head is pivotably mounted with respect to the base about a pivot axis (as per Figure 3), the pivot axis being parallel to the central longitudinal axis and at a side of the shaving head away from the central longitudinal axis; and a drive lever (26) extending from the base, the drive lever having a free end fixedly attached to the drive lever/base (fig. 3), and extending into the shaving head for driving cutters of the shaving head, wherein the free end is tilted relative to the longitudinal axis of the base by an inclination angle.

In regards to claim 10, Brenneman discloses wherein the inclination angle is between 120 and 140 degrees (fig. 3).

5. Claims 8 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ochiai et al. (U.S. Patent 4,505,036), herein referred to as Ochiai. Ochiai discloses a shaving apparatus(1) comprising a base (1a); a shaving head (39) mounted on the base, the shaving head having a central longitudinal axis along a center of the shaving head in a longitudinal direction of the shaving head; wherein the shaving head is pivotably mounted with respect to the base about a pivot axis (as per Figure 2), the pivot axis being parallel to the central longitudinal axis and at a side of the shaving head away from the central longitudinal axis (col. 4, lines 39-44); and a drive lever (33) extending from the base, the drive lever having a free end fixedly attached to the drive lever/base (fig. 3/5b), and extending into the shaving head for driving cutters of the

shaving head, wherein the free end is tilted relative to the longitudinal axis of the base by an inclination angle.

The pivot axis of the shaving head is not expressly shown, however, as stated in col. 4, lines 39-44, the pivot axis of the shaving head is along the axis Y-Y and the pivot is accomplished by the interaction of the concave groove 41 and mating surface of the driving member 42. Therefore, drawing the circle that approximates the eccentric curve of the mating parts, and locating the center of the circle along the Y-Y axis gives a close assessment of the location of the pivot axis of the shaving head as detailed below. Drawing a corresponding longitudinal axis in the depth direction of the sheaving head, it is noted that the pivot axis is below the free end of the lever towards the base.



Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 5, 6, 8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ochiai et al. (U.S. Patent 4,505,036) in view of Pahl (U.S. Patent 4,922,608). In regards to claims 1 and 8, Ochiai discloses a shaving apparatus (1) comprising: a base part (1a) for being held in one hand having a top end and a bottom end; a shaving head (39) being mounted on the base part in a region of the top end of the base part and having a short hair cutting device (35) and a long hair cutting device (10), wherein the short hair cutting device has short hair cutting parts which interact with one another, and wherein the long hair cutting device is formed by a toothed cutting device which has two rows of cutting teeth lying next to one another in a longitudinal direction of the rows, and wherein the shaving head is pivotally mounted with respect to the base part(1a), about a pivot axis running parallel to the longitudinal direction of the rows, and wherein the pivot axis is arranged offset to a side of the shaving head away from a central longitudinal axis (col. 4, lines 39-44) of the shaving head and towards the base part with respect to the short hair cutting parts and the rows of the cutting teeth in a depth direction of the shaving head; a spring (not numbered, see Fig. 4, next to ref. 33) that spring loads the shaving head counter to the depth direction away from the base part and towards a rest position of the shaving head; and a drive lever (33) extending from the base part towards the shaving head along a longitudinal axis of the base, the drive lever having a free end fixedly attached to the base and extending into

the shaving head for driving cutters of the shaving head, wherein the free end is tilted relative to the longitudinal axis of the base by an inclination angle (see Figs. 3 and 5b). Although Ochiai discloses both a long hair and a short hair cutting device, Ochiai does not disclose that the long hair cutting device being arranged next to the short hair cutting device in a first side direction of the shaving head. However, attention is also directed to the Pahl shaving apparatus. Pahl discloses another shaving apparatus (fig. 6) with both two long hair and a short hair cutter that is pivotable about a longitudinal axis, where the axis is not necessarily at the center of the shaving head and may be provided in a neighboring range of the center of the shaving head "to ensure that the entire shaving area usable for shaving is placed in contact with the skin while the shaver housing is held against the skin at typical angles., and that the shearing area of part of the usable shearing area does not become disengaged from the skin surface as the directions of sliding movement of the shearing head over the skin surface change" (col. 6, lines 37-47). As both Pahl and Ochiai disclose similar pivoting shaving head structure, it would have been obvious to have modified the Ochiai shaving head as taught by Pahl to have incorporated two long hair cutting devices on opposite sides of the Ochiai short hair cutter to add to a greater cutting efficiency to the user during operation of the Ochiai cutter.

In regards to claim 2, the modified device of Ochiai discloses wherein the longitudinal axis of the base part (1a) runs between the bottom end and the top end of the base part, and wherein the central longitudinal axis of the shaving head runs parallel

to the depth direction, and wherein the free end is along the central longitudinal axis of the shaving head and wherein the inclination angle is smaller than 180 degrees (fig. 3).

In regards to claim 5, the modified device of Ochiai discloses wherein a second toothed cutting device (as modified by Pahl; fig. 6) is provided and wherein the short hair cutting device is arranged between the two toothed cutting devices.

In regards to claim 6, the modified device of Ochiai discloses wherein the spring means (not numbered, see Fig. 4, next to ref. 33) comprises a wire spring which has a multiple wound middle section and two leg sections and is arranged with its middle section concentric to the pivot axis.

In regards to claims 11 and 12, the modified device of Ochiai discloses wherein the pivot axis arranged below the free end towards the base (as depicted above).

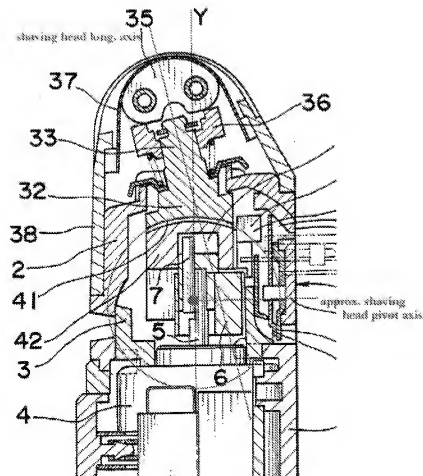
8. Claims 3, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ochiai et al. (U.S. Patent 4,505,036) in view of Pahl (U.S. Patent 4,922,608). The modified device of Ochiai discloses that the angle of inclination is 15 degrees or alternatively, 105 degrees depending upon the referenced axis. Ochiai does not disclose that the angle therefore lies in a range between 120 and 140 degrees, nor is 130 degrees. However, as it is desirable to maintain the shaving head in various operating positions, and particularly at an optimal angle of application to the skin and as both the purpose of the applicant's claimed angle and the angle as shown by Ochiai is to provide an optimum position of the blade relative to the user's skin, it would have been obvious to one having ordinary skill in the art at the time the invention was made

to have modified the Ochiai blade at an angle of about 130 degrees as a matter of design choice to determine and accommodate the best optimal angle for use of the shaver with the user's face since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ochiai et al. (U.S. Patent 4,505,036) in view of Pahl (U.S. Patent 4,922,608) and in further view of Beutel (U.S. Publication 2002/0000043). To the extent that it can be argued that Ochiai does not disclose that the spring means is a wire spring which has a multiple wound middle section and two leg sections it is noted that springs such as coil and leaf springs are recognized within the art as equivalent mechanical structures each designed to create a positive or negative biasing force against an object. Attention is further directed to the Beutel shaving device, which discloses the use of a coil spring (spring element 107) in the locking device 10 for a similar purpose of providing a biasing force against the locking mechanism to keep the lock in place. As leaf and coil springs are art recognized equivalent structures and as Beutel discloses similar use of a coil spring, it would have been obvious to one having ordinary skill in the art to have substituted the leaf spring of Ochiai for a coil spring having a wound middle section and two leg sections (ends) as taught by Beutel as each spring would have performed the desired biasing function equally well and would not have modified the operation or intent of the spring means to hold the shaving head in the secured position.

Response to Arguments

10. Applicant's arguments filed 6/8/2011 have been fully considered but they are not persuasive. Applicant first contends that Brenneman does not disclose where a pivot axis is towards the base part, however, claim 8 does not recite that limitation. Claim 8 only recites that the pivot axis is at a side of the shaving head. The applicant also contends that Ochiai appears to disclose that the shaving head is tilted around a pivot axis along the central longitudinal axis of the main casing. Again, the limitations, state that the pivot axis is offset to a side of a central longitudinal axis of the shaving head, not the base part. As indicated above, the pivot axis of the shaving head of Ochiai is not expressly shown, however, as stated in col. 4, lines 39-44, the pivot axis of the shaving head is along the axis Y-Y and the pivot is accomplished by the interaction of the concave groove 41 and mating surface of the driving member 42. Therefore, drawing the circle that approximates the eccentric curve of the mating parts, and locating the center of the circle along the Y-Y axis gives a close assessment of the location of the pivot axis of the shaving head as detailed below. Drawing a corresponding longitudinal axis in the depth direction of the sheaving head, it is noted that the pivot axis is below the free end of the lever towards the base.



In regards to the applicant's contention that Ochai vibration driving member 42 is not tilted, the examiner did not indicate member 42 as the anticipating feature, Rather vibrating member 32/ pin 33 was considered the drive lever. 32/33 still reads on the limitations, that it extends from the base part with a free end fixedly attached to the base part. Especially considering that applicant's angled drive lever 25 is also pivotable about the axis 26.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA M. LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura M Lee/

Primary Examiner, Art Unit 3724

3/14/2011